

## **AAAAI Ask the Expert 8/31/11**

### **Management of food allergy in schools**

Q: An incoming kindergartner is severely peanut/tree nut allergic. Several questions: Is a peanut free zone in the cafeteria the best way to accommodate lunch times? Will soap and water denature the offending proteins, or is something else or stronger needed? Is a hand sanitizer such as Purell adequate for hand cleaning? Thank you!

A: Thank you for your recent inquiry.

There are a number of very excellent guidelines regarding the management of food allergy in schools. For your convenience, I have copied below abstracts of three of these which I have found particularly helpful. These should serve as future references for you in regards to the management of food allergy in schools. You will note that Dr. Todd Mahr is the co-author of the most recent of these which was published in "Pediatrics." Dr. Mahr is a nationally known expert in this area, and I am asking him to share his opinion and knowledge with us regarding your inquiry. As soon as we receive his response, we will forward it to you.

Response from Dr. Todd Mahr:

As to peanut free zones, part of this is referenced below, but generally, these are hard to follow, they ostracize the peanut allergic child, and it is a slippery slope as to other food allergies, i.e. what do you do with the egg allergic, wheat allergic, etc. We generally teach the child to take a tray, use this as a barrier to the table, and emphasize no sharing of food. I know of schools that will try peanut free zones, but I try and not endorse these. Obviously this takes staff involvement.

By the way, a nice new tool to share with school staff is [www.allergyready.com](http://www.allergyready.com), a free site with a great video for school staff.

From an upcoming Food Allergy and Anaphylaxis Network updated statistics report:

A study showed that peanut can be cleaned from the hands of adults by using running water and soap or commercial wipes, but not antibacterial gels alone. In addition, peanut was cleaned easily from surfaces by using common household spray cleaners and sanitizing wipes but not dishwashing liquid alone. [i]

Some studies have shown that most individuals with peanut and soy allergies can safely eat highly refined oils made from these ingredients. However, cold-pressed, expeller-pressed, or extruded oils should be avoided. Talk to your doctor about avoiding oils made from ingredients to which you are allergic. [ii], [iii], [iv], [v], [vi], [vii]

Casual exposure, such as skin contact and inhalation, to peanut butter is unlikely to elicit significant allergic reactions. [viii], [ix]

Note: Casual exposure presents a greater risk to young children who frequently put their hands in their mouths. Depending on the amount of contact and the location of the contact, these reactions are occasionally more serious.

Food proteins released into the air from vapor or steam from foods being cooked (e.g., fish, milk) can potentially cause allergic reactions, but this is uncommon and has been noted mainly with fish. Reactions from vapor or steam are similar to what you would expect from pollen or animal dander exposures for example, hay fever or asthma symptoms [x], [xi]

[i] Perry TT, Conover-Walker MK, Pomes A, Chapman MD, Wood RA. Distribution of peanut allergen in the environment. J Allergy Clin Immunol.2004; 113(5): 973-976.

[ii]Bush RK, Taylor SL, Nordlee JA, Busse WW. Soybean oil is not allergenic to soybean-sensitive individuals. J Allergy Clin Immunol.1985; 76: 242-245.

[iii]Taylor SL, Busse WW, Sachs M1, Parker JL, Yunginger JW. Peanut oil is not allergenic to peanut-sensitive individuals. J Allergy Clin Immunol.1981; 68: 372-5.

[iv] Hoffman DR, Collins-Williams C. Cold-pressed peanut oils may contain peanut allergen. J Allergy ClinImmunol.1994; 93: 801-2.

[v]Keating MU, Jones RT, Worley NJ, Shively A,Yunginger JW. Immunoassay of peanut allergens in food-processing materials and finished foods. J Allergy Clin Immunol.1990; 86: 41-4.

[vi]Crevel RW, Kerkhoff MA, Koning MG. Allergenicity of refined vegetable oils. Food and Chemical Toxicology.2000; 38(4): 385-393.

[vii]Hefle SL, Taylor SL. Allergenicity of edible oils. Food Technol. 1999; 53: 62-70

[viii]Simonte SJ, Sonhui M, Shideh M, Sicherer S. Relevance of casual contact with peanut butter in children with peanut allergy. J Allergy Clin Immunol, 2003(112):180-182.

[ix]Wainstein BK, Kashef S, Ziegler M, Jelley D, Ziegler JB. Frequency and significance of immediate contact reactions to peanut inpeanut-sensitive children. Clin Exp Allergy. 2007; 37(6): 839-845.

[x]Crespo JF, Pascual C, Dominguez C, Ojeda I, Munoz FM, Estaban MM. Allergic reactions associated with airborne fish particles in IgE-mediated fish hypersensitive patients. Allergy.1995; 50: 257-61.

[xi]Roberts G, Golder N, Lack G. Bronchial challenges with aerosolized food in asthmatic, food-allergic children.Allergy.2002; 57: 713-7.

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